

NOAA and NOAA Partnership Stations Relative to the Storm 10/29/12 8 PM Mayport (Bar Pilots Dock), FL 10/28/12 8 PM Trident Pier, FL ake Worth Pier, F 10/27/128PN /irginia Key, FL 10/26/12 8 PM Vaca Key, FL 10/26/12 8 AM Key West, FL 10/25/12 8 PM 10/25/12 8 AM Active Stations Extent TS Force Winds Extent Hurricane Force Winds 480

## Storm Analysis

As of 10/25/2012 00:00 EDT, water levels from the Florida Keys to Mayport, FL are at or near predicted tide levels and range between 0.1 and 0.6 feet above predictions. Winds range from 10 to 20 knots, with slightly higher gusts. Barometric pressure is falling across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to <u>Mean Lower Low Water</u> are:

Key West, FL: Next predicted high tides are 1.9 ft (0.58 m) at 10/25/2012 07:42 EDT and 1.9 ft (0.60 m) at 10/25/2012 20:02 EDT.

Vaca Key, FL: Next predicted high tides are 1.0 ft (0.30 m) at 10/24/2012 23:59 EDT and 1.0 ft (0.30 m) at 10/25/2012 12:08 EDT.

Virginia Key, FL: Next predicted high tides are 2.6 ft (0.78 m) at 10/25/2012 06:17 EDT and 2.6 ft (0.79 m) at 10/25/2012 18:35 EDT.

Lake Worth Pier, FL: Next predicted high tides are 3.3 ft (1.01 m) at 10/25/2012 05:32 EDT and 3.3 ft (1.00 m) at 10/25/2012 17:50 EDT.

Trident Pier, FL: Next predicted high tides are 4.1 ft (1.24 m) at 10/25/2012 05:11 EDT and 4.0 ft (1.24 m) at 10/25/2012 17:29 EDT.

Mayport (Bar Pilots Dock), FL: Next predicted high tides are 5.4 ft (1.66 m) at 10/25/2012 06:03 EDT and 5.4 ft (1.66 m) at 10/25/2012 18:27 EDT.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For information on Highest Astronomical Tide (HAT), NAVD88 and other datums, please see <u>Tidal Datums</u>. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst: DW			

## SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE SANDY ADVISORY NUMBER 11 NWS NATIONAL HURRICANE CENTER MIAMI FL AL182012 1100 PM EDT WED OCT 24 2012

...EYE OF SANDY APPROACHING THE COAST OF SOUTHEASTERN CUBA...
...COULD BECOME A CATEGORY TWO HURRICANE BEFORE LANDFALL...

#### WATCHES AND WARNINGS

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CHANGES WITH THIS ADVISORY...

THE GOVERNMENT OF THE BAHAMAS HAS ISSUED A HURRICANE WARNING FOR THE RAGGED ISLANDS IN THE SOUTHEASTERN BAHAMAS.

THE GOVERNMENT OF THE BAHAMAS HAS ISSUED A TROPICAL STORM WARNING FOR THE REMAINDER OF THE SOUTHEASTERN BAHAMAS...SOUTHEASTERN INCLUDING THE ACKLINS...CROOKED ISLAND...LONG CAY...THE INAGUAS... AND MAYAGUANA.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A HURRICANE WARNING IS IN EFFECT FOR...

- \* JAMAICA
- \* CUBAN PROVINCES OF CAMAGUEY...LAS TUNAS...GRANMA...SANTIAGO DE CUBA...HOLGUIN...AND GUANTANAMO
- \* THE RAGGED ISLANDS IN THE SOUTHEASTERN BAHAMAS
- \* THE CENTRAL BAHAMAS
- \* THE NORTHWESTERN BAHAMAS

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- \* HAITI
- \* FLORIDA EAST COAST FROM OCEAN REEF TO SEBASTIAN INLET
- \* LAKE OKEECHOBEE
- \* THE REMAINDER OF THE SOUTHEASTERN BAHAMAS

A TROPICAL STORM WATCH IS IN EFFECT FOR...

- \* FLORIDA EAST COAST FROM NORTH OF SEBASTIAN INLET TO FLAGLER BEACH
- \* FLORIDA UPPER KEYS FROM OCEAN REEF TO CRAIG KEY
- \* FLORIDA BAY

INTERESTS ELSEWHERE ALONG THE SOUTHEASTERN COAST OF THE UNITED STATES SHOULS MONITOR THE PROGRESS OF SANDY.

A HURRICANE WARNING MEANS THAT HURRICANE CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA. PREPARATIONS TO PROTECT LIFE AND PROPERTY SHOULD BE RUSHED TO COMPLETION.

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA...IN THIS CASE WITHIN 24 TO 36 HOURS.

A TROPICAL STORM WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE. FOR STORM INFORMATION SPECIFIC TO YOUR AREA OUTSIDE THE UNITED STATES...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

### **DISCUSSION AND 48-HOUR OUTLOOK**

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AT 1100 PM EDT...0300 UTC...THE CENTER OF HURRICANE SANDY WAS LOCATED NEAR LATITUDE 19.4 NORTH...LONGITUDE 76.3 WEST. SANDY IS MOVING TOWARD THE NORTH NEAR 13 MPH AND THIS GENERAL MOTION IS EXPECTED TO CONTINUE WITH AN INCREASE IN FORWARD SPEED TONIGHT AND THURSDAY. A TURN TOWARD THE NORTH-NORTHWEST AND A DECREASE IN FORWARD SPEED ARE EXPECTED THURSDAY NIGHT AND FRIDAY. ON THE FORECAST TRACK...THE CENTER OF SANDY WILL MAKE LANDFALL IN SOUTHEASTERN CUBA DURING THE NEXT FEW HOURS...EMERGE FROM THE NORTH COAST OF CUBA ON THURSDAY...MOVE NEAR OR OVER THE CENTRAL BAHAMAS LATE THURSDAY AND THURSDAY NIGHT...AND MOVE NEAR OR OVER THE NORTHWESTERN BAHAMAS ON FRIDAY.

MAXIMUM SUSTAINED WINDS ARE NEAR 90 MPH WITH HIGHER GUSTS. SANDY IS A CATEGORY ONE HURRICANE ON THE SAFFIR-SIMPSON HURRICANE WIND SCALE. REPORTS FROM AN AIR FORCE RESERVE HURRICANE HUNTER AIRCRAFT INDICATE THAT THE CENTRAL PRESSURE IS FALLING RAPIDLY...AND SANDY COULD BECOME A CATEGORY TWO HURRICANE BEFORE LANDFALL ON THE CUBAN COAST. WEAKENING IS FORECAST AS THE CENTER CROSSES CUBA. HOWEVER...SANDY IS EXPECTED TO REMAIN A HURRICANE AS IT

MOVES THROUGH THE BAHAMAS.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 30 MILES FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 140 MILES. GUANTANAMO BAY CUBA RECENTLY REPORTED SUSTAINED WINDS OF 47 MPH AND A WIND GUST OF 58 MPH.

THE MINIMUM CENTRAL PRESSURE EXTRAPOLATED BY AN AIR FORCE RESERVE HURRICANE HUNTER AIRCRAFT IS 954 MB...28.17 INCHES.

### HAZARDS AFFECTING LAND

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WIND...HURRICANE CONDITIONS ARE EXPECTED TO CONTINUE IN PORTIONS OF JAMAICA FOR THE NEXT FEW HOURS...AND SHOULD SPREAD OVER EASTERN CUBA DURING THE NEXT FEW HOURS. HURRICANE CONDITIONS ARE EXPECTED TO SPREAD ACROSS THE CENTRAL AND NORTHWESTERN BAHAMAS LATE THURSDAY AND FRIDAY. TROPICAL STORM CONDITIONS ARE EXPECTED IN THE WARNING AREA ALONG THE EAST COAST OF FLORIDA THURSDAY NIGHT AND FRIDAY... AND ARE POSSIBLE IN THE WATCH AREA FRIDAY NIGHT.

RAINFALL...SANDY IS EXPECTED TO PRODUCE TOTAL RAINFALL AMOUNTS OF 6 TO 12 INCHES ACROSS JAMAICA...HAITI...THE DOMINICAN REPUBLIC AND EASTERN CUBA...WITH ISOLATED MAXIMUM AMOUNTS OF 20 INCHES POSSIBLE. THESE RAINS MAY PRODUCE LIFE-THREATENING FLASH FLOODS AND MUD SLIDES...ESPECIALLY IN AREAS OF MOUNTAINOUS TERRAIN. RAINFALL TOTALS OF 3 TO 5 INCHES ARE EXPECTED OVER PORTIONS OF THE BAHAMAS...WITH ISOLATED MAXIMUM AMOUNTS OF 12 INCHES. RAINFALL TOTALS OF 1 TO 3 INCHES ARE POSSIBLE ACROSS THE FLORIDA KEYS INTO SOUTHEAST AND EAST-CENTRAL FLORIDA.

STORM SURGE...THE COMBINATION OF A DANGEROUS STORM SURGE AND THE TIDE WILL CAUSE NORMALLY DRY AREAS NEAR THE COAST TO BE FLOODED BY RISING WATERS. THE WATER COULD REACH THE FOLLOWING DEPTHS ABOVE GROUND IF THE PEAK SURGE OCCURS AT THE TIME OF HIGH TIDE...

JAMAICA...1 TO 3 FT SOUTHEASTERN CUBA...4 TO 7 FT CENTRAL AND NORTHWESTERN BAHAMAS...5 TO 8 FT FLORIDA COAST WITHIN WARNING AREA...1 TO 2 FT

SURGE-RELATED FLOODING DEPENDS ON THE RELATIVE TIMING OF THE SURGE AND THE TIDAL CYCLE...AND CAN VARY GREATLY OVER SHORT DISTANCES. FOR INFORMATION SPECIFIC TO YOUR AREA...PLEASE SEE PRODUCTS ISSUED BY YOUR LOCAL WEATHER OFFICE.

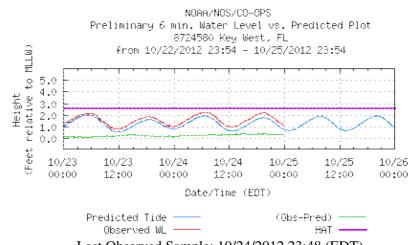
### FORECASTER BEVEN

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to

NOS verification.

Jump to: <u>Key West - Water Level</u>, <u>Key West - Barometric</u>, <u>Vaca Key - Water Level</u>, <u>Vaca Key - Winds</u>, <u>Vaca Key - Winds</u>, <u>Vaca Key - Barometric</u>, <u>Virginia Key - Water Level</u>, <u>Virginia Key - Winds</u>, <u>Virginia Key - Barometric</u>, <u>Lake Worth Pier - Water Level</u>, <u>Lake Worth Pier - Water Level</u>, <u>Trident Pier - Winds</u>, <u>Trident Pier - Barometric</u>, <u>Mayport (Bar Pilots Dock) - Water Level</u>, <u>Mayport (Bar Pilots Dock) - Barometric</u>,

## Key West, FL - Return to List

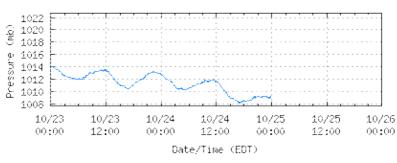


Last Observed Sample: 10/24/2012 23:48 (EDT)

Relative to MLLW: Observed: 1.16 ft. Predicted: 0.81 ft. Residual: 0.35 ft. Historical Maximum Water Level: Oct 24 2005, 3.14 ft. above MHHW

### Key West, FL - Return to List

NOAA/NOS/C9-0PS 8arometric Pressure Plot 8724580 Key West, FL from 10/22/2012 23:54 - 10/25/2012 23:54

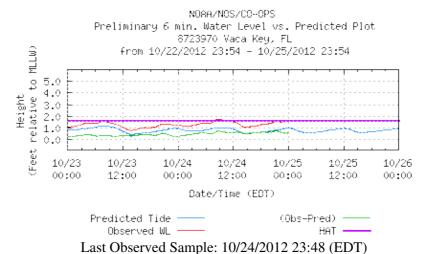


Last Observed Sample: 10/24/2012 23:48 (EDT)

Barometric Pressure: 1009.1 mb

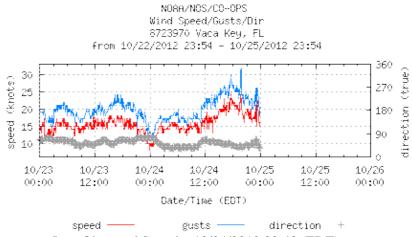
barometric pressure -

# Vaca Key, FL - Return to List



Relative to MLLW: Observed: 1.56 ft. Predicted: 0.99 ft. Residual: 0.57 ft. Historical Maximum Water Level: Oct 24 2005, 5.8 ft. above MHHW

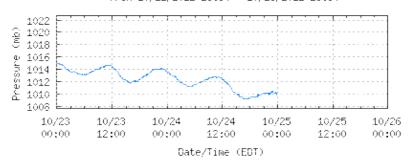
## Vaca Key, FL - Return to List



Last Observed Sample: 10/24/2012 23:48 (EDT) Wind Speed: 15 knots Gusts: 18 knots Direction: 39° T

### Vaca Key, FL - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 6723970 Vaca Key, FL from 10/22/2012 23:54 - 10/25/2012 23:54



barometric pressure ——

Last Observed Sample: 10/24/2012 23:48 (EDT)

Barometric Pressure: 1009.9 mb

# Virginia Key, FL - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8723214 Virginia Key, FL Height (Feet relative to MLLW) from 10/22/2012 23:54 - 10/25/2012 23:54 5.0 4.0 3.0 2.0 1.0 10/23 10/24 10/24 10/25 10/25 10/26 10/23 00:00 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT)

Predicted Tide —— (Obs-Pred) —— Observed WL —— HAT ——

Last Observed Sample: 10/24/2012 23:54 (EDT)

Relative to MLLW: Observed: 0.97 ft. Predicted: 0.51 ft. Residual: 0.46 ft. Historical Maximum Water Level: Oct 24 2005, 2.58 ft. above MHHW

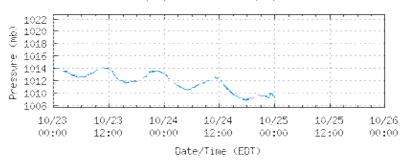
## Virginia Key, FL - Return to List

NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 8723214 Virginia Key, FL from 10/22/2012 23:54 - 10/25/2012 23:54 360 30 speed (knots) 270 25 20 direction 180 15 90 10 0 10/24 10/24 10/23 10/25 10/25 10/23 10/26 00:00 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT) gusts direction speed

Last Observed Sample: 10/24/2012 23:54 (EDT) Wind Speed: 15 knots Gusts: 18 knots Direction: 70° T

## Virginia Key, FL - Return to List

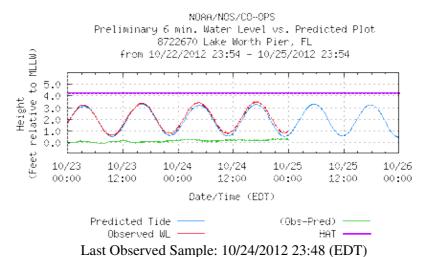
NOAA/NOS/CO-OPS Barometric Pressure Plot 8723214 Virginia Key, FL from 10/22/2012 23:54 - 10/25/2012 23:54



barometric pressure ——
Last Observed Sample: 10/24/2012 23:54 (EDT)

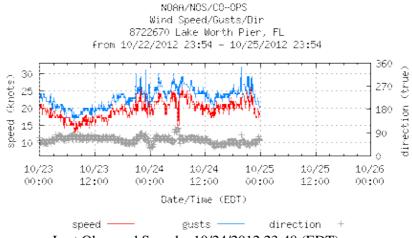
Barometric Pressure: 1009.3 mb

### Lake Worth Pier, FL - Return to List



Relative to MLLW: Observed: 0.98 ft. Predicted: 0.65 ft. Residual: 0.33 ft. Historical Maximum Water Level: Nov 23 1984, 1.88 ft. above MHHW

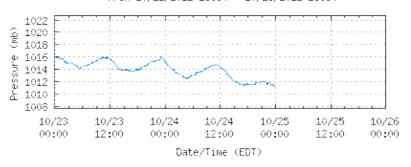
## Lake Worth Pier, FL - Return to List



Last Observed Sample: 10/24/2012 23:48 (EDT) Wind Speed: 18 knots Gusts: 20 knots Direction: 61° T

### Lake Worth Pier, FL - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8722670 Lake Worth Pier, FL from 10/22/2012 23:54 - 10/25/2012 23:54



barometric pressure —— Last Observed Sample: 10/24/2012 23:48 (EDT)

Barometric Pressure: 1011.4 mb

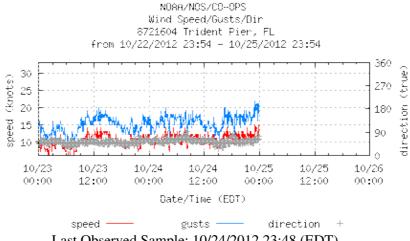
### <u>Trident Pier, FL</u> - <u>Return to List</u>

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8721604 Trident Pier, FL Height (Feet relative to MLLW) from 10/22/2012 23:54 - 10/25/2012 23:54 5.0 4.0 3.0 2.0 1.0 10/23 10/24 10/24 10/25 10/25 10/26 10/23 12:00 00:00 12:00 00:00 12:00 00:00 00:00 Date/Time (EDT) Predicted Tide (Obs-Pred)

Observed WL —— HAT —— Last Observed Sample: 10/24/2012 23:48 (EDT)

Relative to MLLW: Observed: 1.26 ft. Predicted: 0.83 ft. Residual: 0.43 ft. Historical Maximum Water Level: Sep 26 2004, 4.01 ft. above MHHW

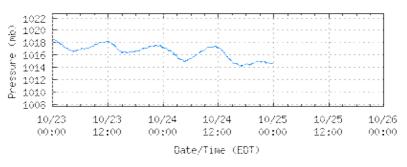
## Trident Pier, FL - Return to List



Last Observed Sample: 10/24/2012 23:48 (EDT) Wind Speed: 15 knots Gusts: 21 knots Direction: 75° T

## Trident Pier, FL - Return to List

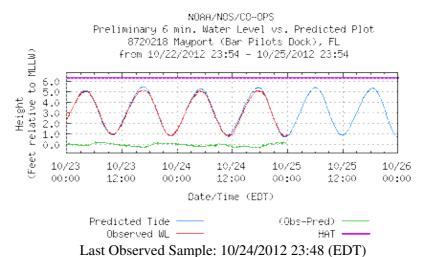
NOAA/NOS/C9-9PS Barometric Pressure Plot 8721604 Trident Pier, FL from 10/22/2012 23:54 - 10/25/2012 23:54



barometric pressure ——
Last Observed Sample: 10/24/2012 23:48 (EDT)

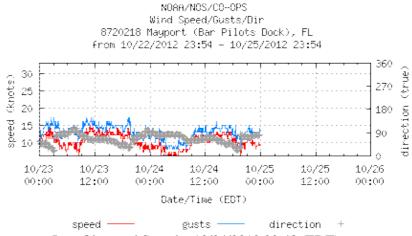
Barometric Pressure: 1014.6 mb

## Mayport (Bar Pilots Dock), FL - Return to List



Relative to MLLW: Observed: 0.85 ft. Predicted: 0.72 ft. Residual: 0.13 ft. Historical Maximum Water Level: Sep 27 2004, 2.47 ft. above MHHW

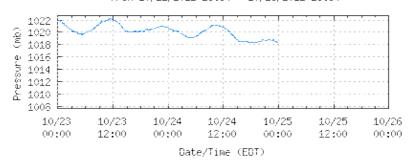
## Mayport (Bar Pilots Dock), FL - Return to List



Last Observed Sample: 10/24/2012 23:48 (EDT) Wind Speed: 9 knots Gusts: 14 knots Direction: 82° T

## Mayport (Bar Pilots Dock), FL - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8720218 Mayport (Bar Pilots Dock), FL from 10/22/2012 23:54 - 10/25/2012 23:54



Last Observed Sample: 10/24/2012 23:48 (EDT)

barometric pressure

Barometric Pressure: 1018.3 mb

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